



# **Effective Seed Storage in Timor-Leste (ESS)**Funded by USAID, Office for Foreign Disaster Assistance - OFDA

# **Quarterly Report** October 2012 - December 2012



Country Contact	Headquarter Contact	Project Summary	
Joanna Walshe Country Director	Julie Rogers Program Officer	Award No.	AID-OFDA-G- 11-00174
Address: Rua de Nu Laran, Bairo Dos Grilhos, Dili, Timor Leste. Ph. +670 3312726 Mob. +670 739 9045 Email. jwalshe@tl.mercycorps.org	Address: 45 SW Ankeny, Portland, Oregon, USA Ph. +1(503) 896-5897 Fax. +1(503) 896-5011 Email. jrogers@mercycorps.org	Start Date End Date Report Date Total Award	11 August 2011 11 February 2013 31 January 2013 US\$ 247,501

### **Executive Summary**

The majority of farmers in the target districts of Ainaro and Manufahi in Timor-Leste rely on subsistence agriculture for their livelihoods and are effectively caught in a poverty trap, with poor seed quality and poor storage fundamental to this problem. The continuous use of farm saved seed leads to reduced yields, and the lack of appropriate on-farm storage results in a high percentage of post-harvest seed loss. These problems, combined with a lack of market access, result in falling incomes for farmers over time. At present, effective storage for seed is not available for the majority of farmers in rural Timor-Leste. Based on the results of an in-depth preliminary assessment, Mercy Corps is implementing a seed storage program to introduce appropriate and effective post-harvest storage systems, primarily focusing on maize, the main staple crop in Timor-Leste. Through the Effective Seed Storage (ESS) program Mercy Corps is moving away from the distribution/handout model, and implementing a market-led approach to storage that has not been applied in Timor-Leste to-date.

The ESS program involves local manufacturers in efforts to increase access to improved storage systems, and combines this with capacity building for farmers and extension workers to sustainably link farmers with viable input and output markets. The program complements an existing 3.5 year, \$1.7 million European Commission (EC) funded Sustainable Crop Production, Utilisation, and Resource management through Capacity Enhancement in two districts of Timor-Leste (SECURE) program, implemented by Mercy Corps and partners in the two target districts. ESS is filling a critical gap in the ongoing program while benefiting from cost efficiencies and established relationships with farmers and the Ministry of Agriculture and Fisheries (MAF).

## **Performance Summary**

Sector:	<b>Objective:</b> Sustainable post-harvest protection of seeds and			
Agriculture and Food Security	grain stocks improve crop production and livelihoods in rural			
	Timor-Leste			
Beneficiaries Targeted	27,503		Budget	\$247,501
	IDPs: 0			
Beneficiaries Reached	16,705	$61\%^{1}$	Amount	\$130,925
	IDPs: 0	0%	Spent	
Geographic Area (s)	Ainaro and Maufahi District - Timor Leste			
Sub- Sector: Seed System Security				
OFDA Indicator	Baseline	Target	Progress	Last Day of
			(Date)	Report
				Period
1. Projected increase in number of	Number of	At least 3	0 (will be	December

<sup>&</sup>lt;sup>1</sup> This number has not included yet the number of additional farmers expected to adopt introduced technique(s) as a result of the extension workers and training participants outreach (which is the number of farmers who are not direct recipients of the project training activity and/or voucher but then adopt improved techniques learned from the trained farmers and/or extension workers). Together with non-voucher recipient buyers, they are predicted to make up an additional 3,120 households (19,000 individuals) where 923 of them (~5,621 individuals) are already reported here based on the manufacturers' sales data but are not yet included in projections of farmers who have only adopted the technique(s) that will be assessed and reported at end-line.

months of food self-sufficiency due to seed systems activities/ agricultural inputs for beneficiary households	months of food sufficiency is 8.1 months	months	reported at endline)	31, 2011
2. Number people benefiting from seeds systems/agricultural inputs activities, by sex	0	1,560	1,514	December 31, 2012
Mercy Corps Indicators				
2.1 # of improved storage designs	0	3	3	February 29, 2012
2.2 # of local storage manufacturers trained	0	4	$2^2$	July 31, 2012
2.3 # of trainings	0	52	61	December 31, 2012
2.4 # of early adopters	0	1,560	1,514	December 31, 2012
2.5 # of additional farmers with access to storage solutions	0	1,560	923 <sup>3</sup>	September 30, 2012
2.6 % decrease in seed storage losses amongst pilot farmers	0%	50% reduction in seed loss	0 (will be reported at endline)	December 30, 2011
2.7 # additional months maize is available in the household as a result of improved storage	0	3	0 (will be reported at endline)	December 30, 2011
2.8 # of additional farmers purchasing storage for seed and/or adopting introduced technique(s) learned from trained farmers and extension workers' outreach	0	3,120	9234	December 31, 2012
2.9 % increase in grain / seed sold by farmers as a result of new storage solutions	0	30%	0 (will be reported at endline)	December 30, 2011
3. # of extension workers trained in both districts	0	26	37	March 21- 22, 2012

# **Sector Summary**

This report is an update of the annual report submitted in October 2012. The focus activities for this quarter were: (i) continue to conduct trainings with farmers on post-harvest management; (ii) select voucher recipients and distribute vouchers; (iii) conduct district level informational workshops.

<sup>2</sup> As reported previously, the project decided to work with two local manufacturers (instead of 4 as planned) mostly due to the need to optimize the manufacturers' production capacities.

<sup>&</sup>lt;sup>3</sup> Based on manufacturers' sales data.

<sup>&</sup>lt;sup>4</sup> See Footnote 1.

# Additional 1,059 farmers in 19 aldeas (villages) were trained on good practices in post-harvest handling

In partnership with government extension workers and local NGO partners, the project staff facilitated post-harvest training for target farmers. The two-day training activities were designed to combine theoretical and practical/experiential techniques incorporating adult learning principles as well as good local practices (such as the "mouth-biting" method to determine the level of grain/seed moisture to determine whether it is ready for storage). The training covers not only post-harvest techniques for maize and rice but also for various beans. It also includes information on seed production and selection, harvest time and techniques, drying methods, storage techniques, etc.

The training was also used to promote a variety of effective seed storage solutions and to disseminate project plans to support farmers' access to the selected

Number of participant farmers on the supported post-harvest training Oct – Dec 2012

Ainaro	Female	Male	Total
Soro	113	44	157
Cassa	29	22	51
Manufahi			
Daisua	9	12	21
Hola Rua	148	78	226
Betano	79	171	250
Babulo	152	202	354
Letefoho	56	205	261
	530	529	1059

storage unit. During this reporting period, a total number of 1,059 farmers (50% women) enthusiastically participated in trainings across 19 aldeas in 6 sucos. Up to this reporting period, a total number of 2,076 farmers (42% women) were trained by the program across 70 aldeas.

#### An additional 932 farmers accessed seed storage units

A total number of 1,514 early adopter farmers across the target sucos redeemed their vouchers (out of 1,560 distributed vouchers) to help them purchase storage units. So, an additional 932 farmers accessed the improved storage unit during this reporting period. In December, an additional 650 vouchers were distributed as a result of savings from the respective budget line item due to the decreased value of the subsidy voucher. As previously reported, the project has been able to facilitate manufacturers to find cheaper materials that cut the price of the unit by half and thus provided an opportunity for the project to reduce the voucher's value (from \$30 as initially planned down to \$20).

# 52 farmers who accessed the subisdized unit were consulted to provide feedback on storage design and 2 local manufacturers were trained in business management

As was reported in the annual report, in October the project team was able to conduct a rapid assessment with 52 farmers who accessed the subsidized storage units. The survey was done to check whether the unit is being used for grain/seed storage and to provide feedback for the manufacturers to improve their products and services. More than half of respondents have used the storage unit and are mostly using it to store maize seeds (12% are using it for rice seeds, 4% for various beans, and the rest for maize seeds). Meanwhile, 48% of respondents have not been able to use it mainly (60%) because currently they don't have seed stock but plan to use it after the next harvest (this month farmers in some areas have just

started the main maize growing season). 28% of farmers who have not yet used the unit said they had just acquired it and will be using it soon. 8% of respondents would like a different color (white and light green – as it is believed insects don't like it) than is currently available (dark red and dark blue). 12% would like a larger PVC lid opening(s). 8% of respondents feel that the price is still too high, despite receiving subsidy vouchers. Based on this feedback, design improvement is underway to ensure that the next generation of storage units will have larger openings and different colors will be made available. Different types of sealant are being tested to further reduce the unit cost. It is understood that this process should ideally be led by the manufacturers themselves as part of the company's R&D activities. But it should be understood that due to low managerial capacity of the local manufacturers, the program needs to help them with this process while simultaneously working to improve their business capacity. It is clear that strengthening the capacity and outreach of these local businesses will be the key to sustainability and expanded reach of the storage solutions over time.

In addition to the soliciting feedback from users, the project staff also provided capacity building (training and mentoring) on business management to both local manufacturers involved in the project. This activity focused mainly on: (i) simple profitability analysis, (ii) basic bookkeeping, as well as (iii) development of marketing plan. As a follow on to this training, Mercy Corps helped local manufacturers prepare for and participate in the Permascout exhibition in Baucau in addition to launching a marketing campaign in local markets in Manufahi and Ainaro.

### Actively coordinate with other initiatives to facilitate market access opportunities

Through the SECURE program (ESS complementing program), Mercy Corps has introduced improved quality of seeds (maize, rice and peanuts) through an informal seed multiplication program in partnership with the government's Seed of Life program. Mercy Corps has given priority to 22 selected seed multipliers to also be early adopters for the ESS project. This includes providing training and facilitating market access opportunities, especially targeting the suppliers' neighborhood areas. During the month of October and November, 'modified' seed fairs were conducted in 7 target sucos. This activity was 'modified' in that, instead of mobilizing different seed multipliers/merchants to trade at a single location fair venue, the project conducted preliminary selection (open tender) of interested multipliers/merchants wishing to participate in seed fair activities and then gave target farmers direct access to the original location of the multipliers/merchants for a certain period of time. Price and quality were pre-negotiated and pre-determined ensuring that they are as 'fairly' as possible. This 'decentralized' fair had additional benefits of no additional costs for multipliers to rent the fair venue and to bring the products to the venue location. In addition, it is expected that farmers will know exactly where the multipliers/merchants are located for future seed needs, etc. Vouchers with a value totaling \$5,782<sup>5</sup> were distributed to the 826 selected vulnerable farmers. 11 informal seed multipliers/merchants engaged in the fairs and approximately \$15,000 worth of seed was traded during the activity. The major commodity sold was improved quality maize, while rice and red beans and peanuts were sold in smaller quantities.

<sup>&</sup>lt;sup>5</sup> Total value of 826 individual vouchers, financed through SECURE program.

### Informational workshops with stakeholders held in two districts

During this reporting period, two workshops were held, one in Ainaro and the other in Same, Manufahi district. A full day workshop was designed to promote the improved storage unit to broader stakeholders as well as to capture learning from the early adopters who have accessed it. In Same, the workshop was held on December 5<sup>th</sup> with 78 participants (42% women) from different organizations (District Administration Office, Ministry of Agriculture, international and local NGOs, local media, micro finance institution, farmer groups) in attendance. In Ainaro, a similar workshop was carried out on December 14<sup>th</sup> with 68 participants (37 women). One of the major issues raised during both workshops is the need to expand the program into other areas not currently targeted by the project. In addition, from a technical perspective, participants expressed the need for instructions on how to maintain the storage units (i.e. ensuring that farmer will clean the unit before re-using it, what to do if the unit is leaking, etc.) and requested these be included on the existing instructions sticker which currently only addresses use. For the program expansion, further coordination with extension workers and the Seed of Life (SOL) program that specifically promotes high quality seeds (i.e. ensuring that farmers will get a 'complete package' of access to improved seed and improved storage unit) needs to be enhanced to provide greater impact.

## **Cross-Cutting Themes**

N/A

## **Monitoring and Evaluation**

At the end of this reporting period, the project has advertised for the recruitment of a consultant to conduct the project final evaluation. The scope of the evaluation will include the following:

- 1. Assess the program achievements against indicators.
  - a. Projected increase in # of months of food self-sufficiency due to seed systems activities/agricultural input for beneficiary households;
  - b. # of people benefiting from seed systems/agricultural input activities, by sex;
  - c. Projected % decrease in seed storage losses amongst pilot farmers;
  - d. # additional months maize is available in the household as a result of improved storage.
- 2. Evaluate effectiveness of developed storage system and BCC material and activities
  - a. Evaluate effectiveness of the designed storage system and gather feedback from users on the design of the developed storage unit;
  - b. Evaluate effectiveness of BCC material and activities and its adoption level by farmers;
  - c. Assess impact of the program on gender dynamics (in particular at the household level).
- 3. Evaluate the effectiveness of market development of developed storage unit.
  - a. Assess economic viability of supported local manufacturers;
  - b. Evaluate effectiveness of voucher system;
  - c. Assess capacity of storage manufacturers to embed extension services on better postharvest handling.

- 4. Capture learning and good practices for program improvement.
- 5. Provide recommendations for improvement of strategy and approach of nation-wide extension of the program.

### Coordination

During this period, the Program Manager and Project Coordinator attended various coordination meetings both with other INGOs and the Ministry of Agriculture and Fisheries (MAF). The following summarizes the coordination meetings attended:

- November 6<sup>th</sup>. FAO held a roundtable discussion on Conservation Agriculture (CA) with MAF and development partners in which the Project Coordinator participated. The introduction of CA is expected to increase farmers' production and thus enhance the need for access to effective storage systems which manufacturers should be able to tap in.
- November 23<sup>rd</sup>. The Project Coordinator presented the ESS project to the Permascout participants (permanent agriculture scout – a program to promote sustainable agriculture through scout camping events - where more than 1,500 youth farmers from different districts participated).
- December 10<sup>th</sup>. INGO food security working group meeting. The Program Manager presented an ESS project update to the other working group members.

End --